

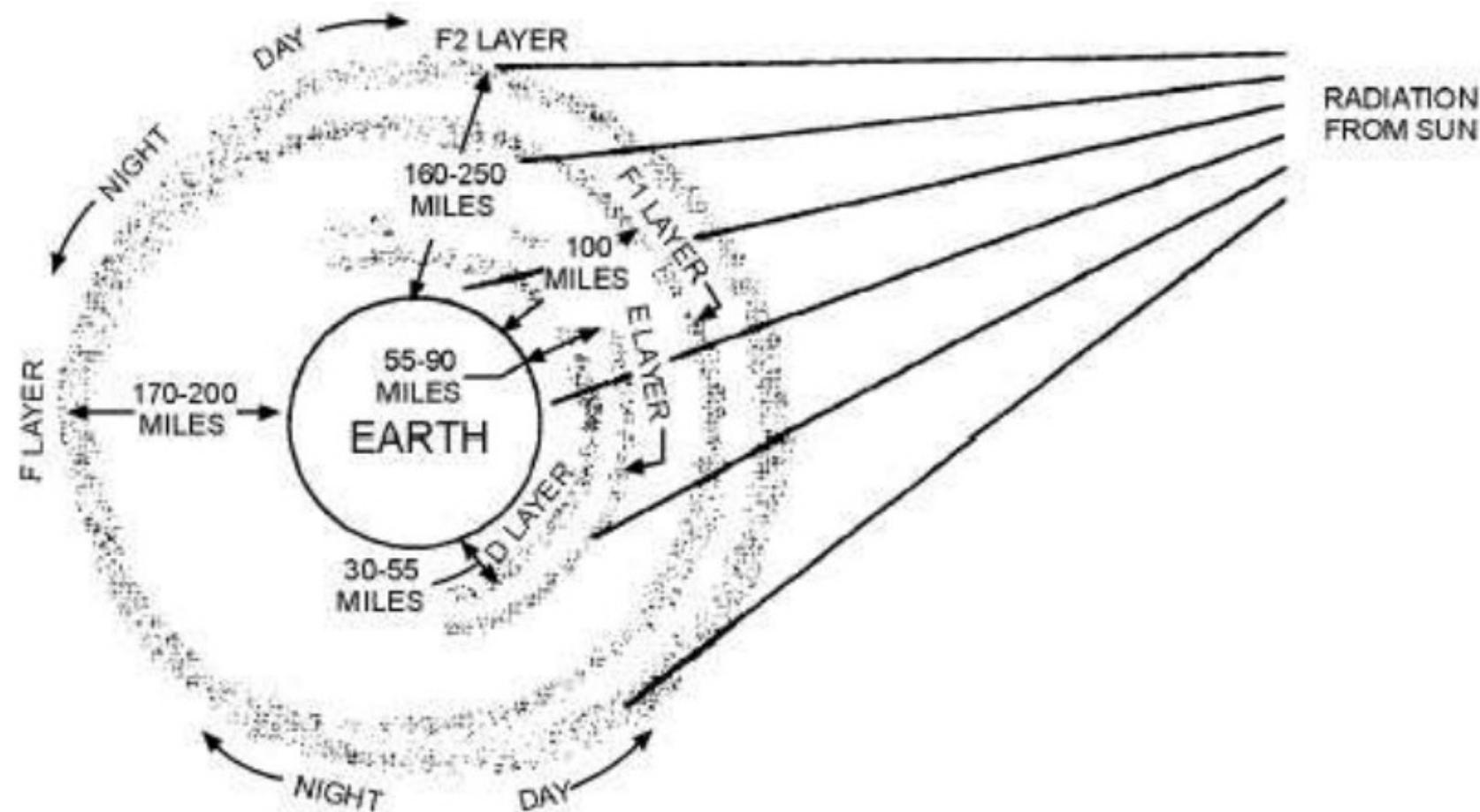


HF Propagation

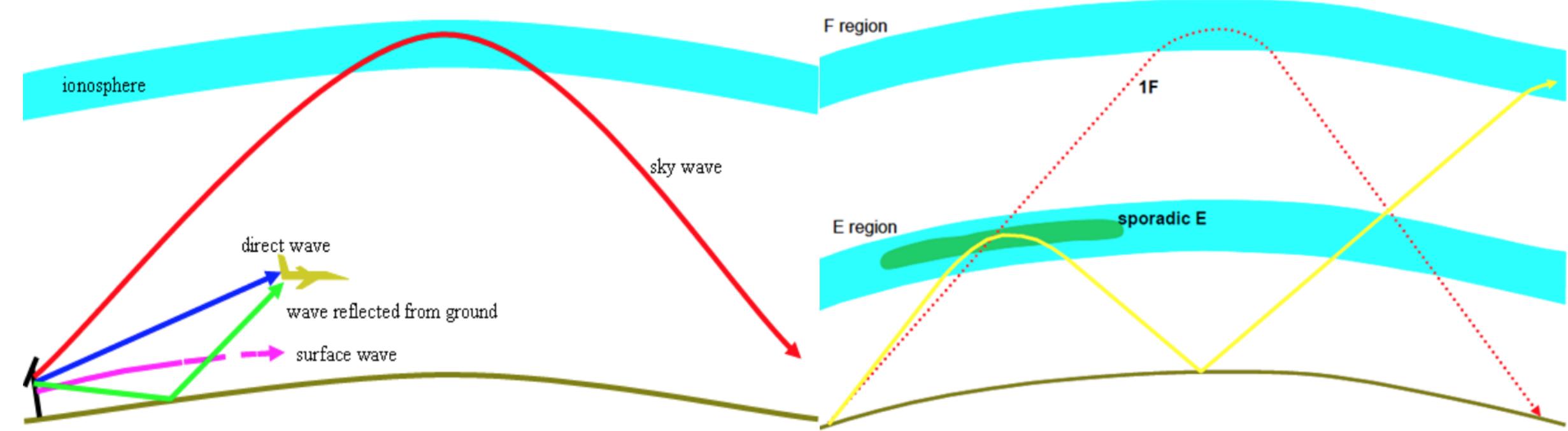
A quick look at how it all works

Simple model of the Ionosphere (Carl, K9LA)

- http://k9la.us/The_Structure_of_the_Ionosphere.pdf



Radio Propagation via Ionosphere (Aus. Gov.)



Recommend: <http://www.sws.bom.gov.au/Educational/5/2/2>

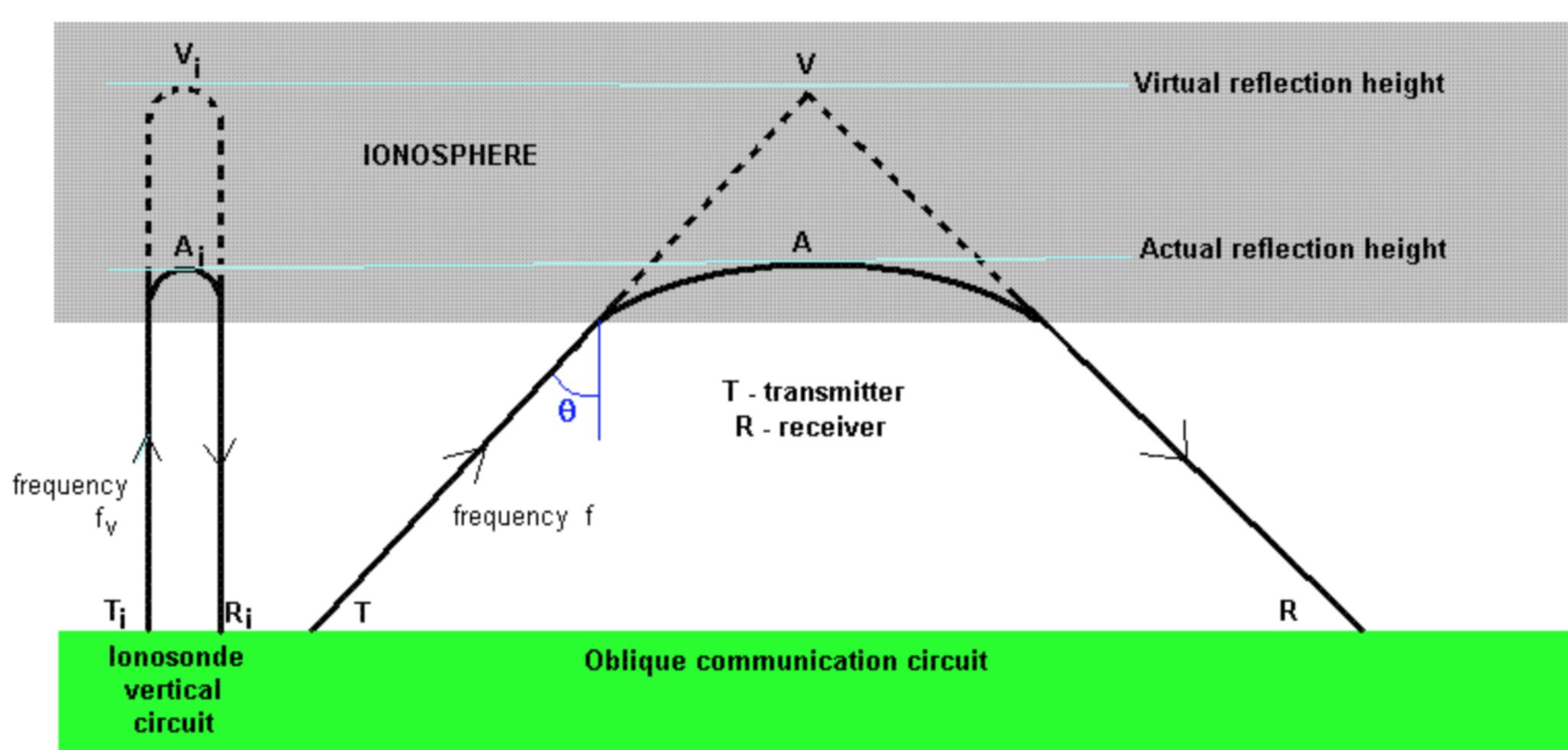


Ted and Karyn
Hume Center for National Security and Technology

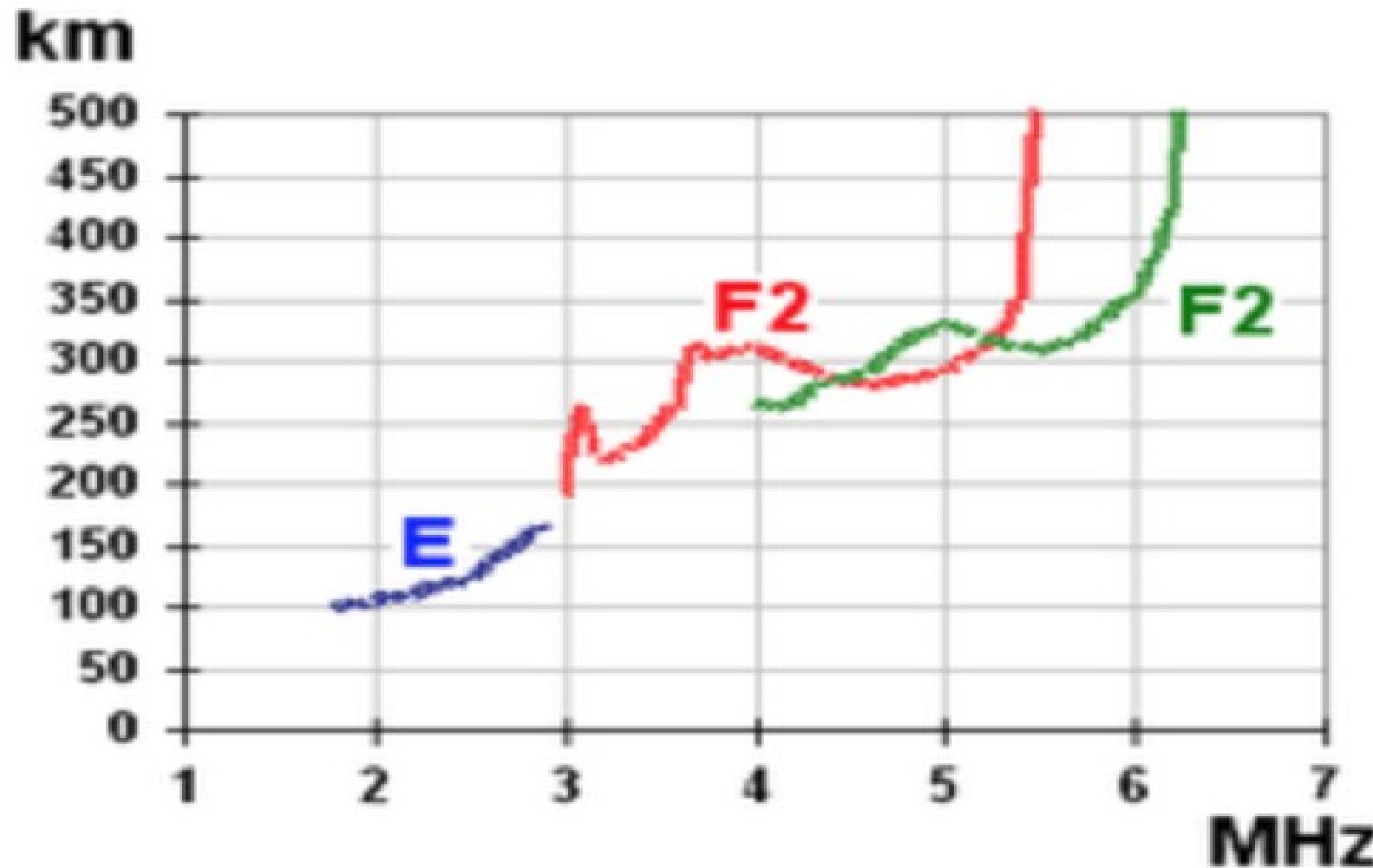
Ionosonde

HF ionospheric radar

Two simple views of an ionosonde in action



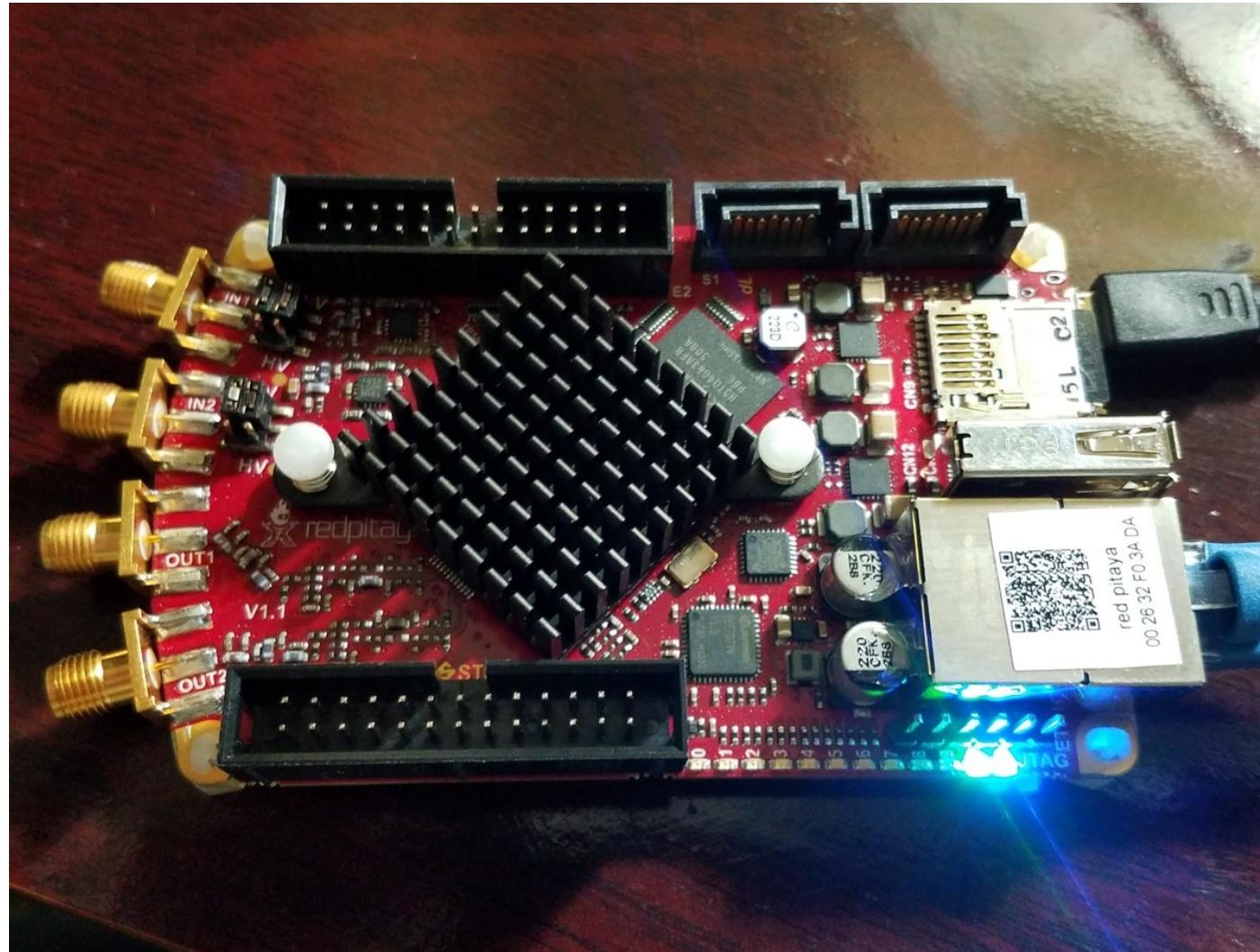
What kind of data do we get from ionosonde?



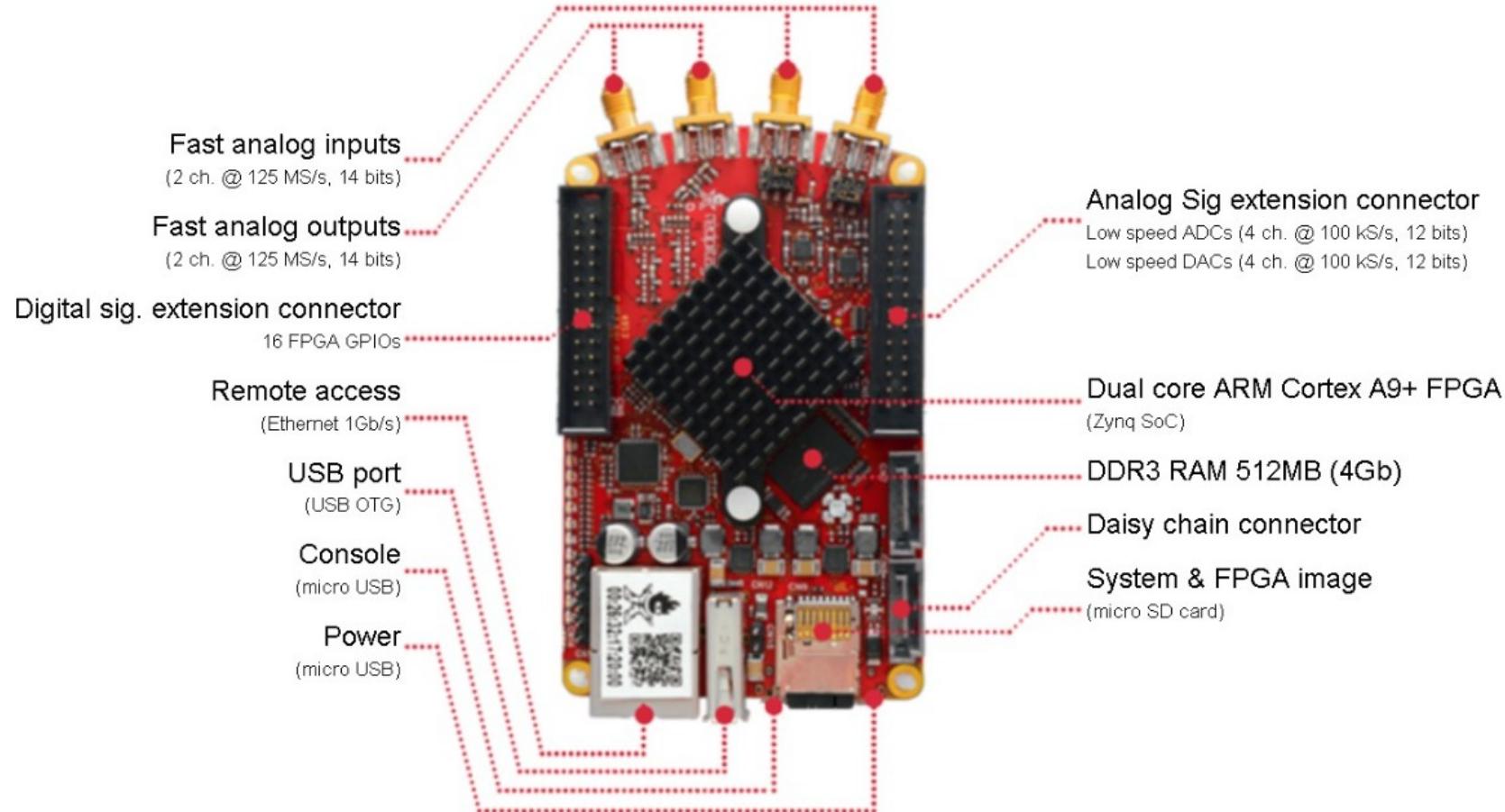
Our Ionosonde

Current implementation details and plans going forward

Red Pitaya SDR



Hardware Overview



- Questions?
- Contact: Dr. Bob McGwier, rwmcgwi@vt.edu



VirginiaTech

Institute for Critical Technology and Applied Science

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